Mott Journal #6 [PN-81-01-19]

This is the last of six pocket notebooks used by Charles P. Mott, a member of the office staff at Menlo Park, to record daily activities at the laboratory. The entries from these notebooks were used as the basis for more extensive entries recorded by Mott in Menlo Park Notebooks #53 and #117. The entries in this pocket notebook, which covers the period January-March 1881, continue beyond the entries in Menlo Park Notebook #117, which ends in January 1881. The front cover is labeled "155" and is inscribed "C. P. Mott Jany 19. 81" and "6." The pages are unnumbered. Approximately 50 pages have been used.

Wednesday Jany 19 81.

Telephone, one box of red from Bergmann & Mopper can pay receive etc.

Carbonization Mr. Batchen hot spoted from factory – carbonized one, taken away again without opening.

Illumination about 500 lamps were burned last night a large number of visitors during the evening, Cummings Clarke, Wilson & Robin, from and a number large gas consumers.

Supply lamps Motto made Pat. off Keasings new lamps etc. according to resistance

Thursday Jany 20 1881

Lat. Screws & Packages of Rat-
Screws for clamps used, from Sentyman

Lights. Lights! Article of Trade
Popular Market goods. Made for
Middleyes from Bilty to lay wires

Heater. One, in making of [illegible] of large
for heating wire springs in making
Mach. of Mahlem for gas [illegible]

Well. Men sunk some additional feet
to remove digging well.

Metal Lamps. are being made at The
Factory various designs & shapes made
for Foreign Customers.

Illumination. lighted again
to remember [illegible]

Friday Jany 21. 1881

Papers. Herald has short Editorial
on the unfairness of the requirements
of the City, to use the Gas, for
privilege of putting in wires etc.

Ethereal Dynamo. for Mr. Tolles gave
[illegible] volts at speed of [illegible] running
dynamo.

Carbonization. Could by Professor
Chapmenned of Hard and Hornes
making Preparations to experiment
on Carbonizing. Cin. Burns & Company

Illumination. lit again tonight for
visitors. Examination of Post Office
Tickets now for extreme Inflammation
on the office

Heating. Farmers commenced placing
Pressure Gauge. Annunciator clocks.

Saturday Jany 22. 81

Special Dynamo. No 1 of 1 lamps run by special at two revolutions and gave about 5 candles to the lamp.

64 volts at Machine. 46 at last lamp
Outlet wires get 53.8 at first lamp & 50.5 at last lamp. 2.3 ohm 44 ohm.

Absent Mr. Edison.

Meter. used from Bergmann.

Carbon coating Stove. tried on air pump to coat with glycerine & Nitric acid, &c.

Work general, large dynamo nearing completion, special machine for No. 9 furnace and battery. All working hard with people. Phloem di bands for making conduct.

Monday Jany 24. 81

Boiler. No steam yesterday and the boiler thoroughly cleaned and examined.

Absent Mr. E. ~~Mr B.~~ at N.Y.

Carpenter shop. store room back of laboratory cleaned for carpenter shop.

Carbon coating Stove got good results on coal powder sulphur in place of Boracic carbon in air pumps.

Candle & Engy. Francis Bliss he has fully demonstrated a law that in any case double the energy gives 8 times the candles.

Tuesday Jany 25-81

Went Mr. Edison again at N.Y.

Plating the silver plates to moisten
Keeping pitting. Mr. Moses using Tweezers
on ends before placing in solution.

Water Meters ... lamp
on carbon cross.

Electric Ry. Dynamo shipping to day.

Cable paper. Sheet made by Mr. E. of paper
with insulating pieces placed between
form contact and admit of running
in an insulating material.

Steam put in Cable once a slight
shaving turner off.

Factory small gas stand routing and

Wednesday Jany 26.

Continuing. 1st model taken from
Mr. Farmer in Foreman room about
full size on the B.R. on 708 Mains

Steam calculator test. preliminary made
by Blake & Ericsson. steam determined
to be superheated, 150 pgs. 101. - cost 17 £ B.

Machine Exp. machine fired for prom
the main multiple are working very good
results but Francis thinks not so good as
our exciting machine.

Illumination. All lamps to be very long
very smooth. several of Mr. Mains
Porcelain here, also Tommy Goddard
some separate & plenty. Wallace.

Furnace Mott made Pat. office drawings
of Hand scroll in connection with the
universal bracket.

Thursday, Jany 27, 81	Friday, Jany 28
Absent Mr. Edison, report he has gone to Washington	Absent Mr. Estein absent Visitor Mr. Goddard here nearly all day
Gate Alley, man here to see about putting engine location	
Space dynamo, Bunn moving some machine to be finishing, busy, exp	Labor Indicators used last night and adjusted, cleaned & rec'd by Mr. Clare
Carbonization, Acheson got excellent results carbons at low heat in long combustion tube, heated the whole night	Galvm. Chem. testing Aluminum, Magnesium, Glucina, silica, cerium, oxide, Barium chloride, Mechanical Mixture in ether, applied with brush improve lt
Illumination, lit this evening a number of visitors here	Elevator, put in Factory, fixed Glass Display 145 to 2nd floor
Lysotte, Acc made solution of a number different insects Nov 4, 81	Platinum Expansion, Exps made by Mode of expansion of platinum by cement, showing the adaptability for Meter purposes
	Washington, Mord B. Newman 110 to 330

Saturday Jany 29.

Hines & Hutchins, Foss, Cunningham & Thompson
X. Drill Martin, dynamo & selling up lamps
for Hines & Hutchins in Water St.

Factory Eng. received on Service
Six days.

12 Rec tests Engine & Campbell sum ale
Night 12 Rec and tests made 426.
X. 426 = 10 circuit & fuse machine side
to Table 10

Vienna tests 7 circuit & on Cross wires.
X 2 ohms on Artificial made ground
2 ohms.

Monday Jany 31.

Victoria Rice Rice & Man to setup Eng.
Absent Mr Clemow at R.C.

Plumbage Holiday made plates & fixed
X the two cylinder engine for passing
plumbage in Hydraulic Press.

Carbonizing. Mr. B carbonized 12 dms
X Caps on which to carbonize paper
by current in bottle of Air pump.

Tuesday Feby 1. 81.	Wednesday Feby 2. 81
Dynamo last disc tested all O.K.	Plate clamps, excellent record. Plat with insion of seal discovered on Negative plate.
Carbonization, paper was carbonized potassium made carbon, no metallic but some black.	Absent Mr. Edison & Clarke in N.Y.
Filament Mr. B. had relic made for working up meter.	Carbonization, Carman & Jackson state got nitrogen to experiment on carbonizing yet lost time, bodies in tube with gas.
Mining Camp. Stell. made for Mr. Morgan Andrews to move Kan. on Wed. in for a month to have cement without sparks	Shimmington, till lamps lit. for pressure here, very cold, drawing pulley again slipping.
Absent Mr. Clarke in N.Y.	Spiral carbons, tree spiny carbon Yampa wire sent up tested up & one way line in globe no better results.

Thursday Feby. 3. 81

Carbonization was started today in Vacuum air driven out by Gasoline gas & heated by current.

Visitors Lemoul from Paris

Visitors Mr. Adams morning & Colonel Jones for Hastings & window dynamo for water experiments.

Other cutting die needs some repairs & work very nicely. Carbonized by Lamp.

Experiments Russian taken apart for repairing.

Series Hardware machine. Device for Multiplex arc system Gin Mr. Gross & other officers & Charles on other business.

Friday Feby. 4. 81

Absent Mr. Batchelor left at 11 to take the ~~[illegible]~~ train for the morning. Edison in Mr.

Visitors Bigler of Sterling, Some Clerks from Baltimore

Dynamo Dynamo, Commutator and Field ends placed on shaft and bars being placed.

Carbonization Lamp gas pure, Gasoline, and common gas used since from time of cutting Mondays.

Motor Arm dec. placed, run from of propeller for the clock work for balance wheel, former with diamond shaped dive, on arm and arranged to count at each vibration of the clock.

Saturday Feby 5-81

Gardiner, Dr. Blake claims he has
X been awarded $100 for Metallic carbon

Wheeling Bros. Dynamo finished, put on at
X Co Bros. gave 59 volts, annealing 6 ohms
Lt 3 incd. Lamps to about 8 candles each

Boston, receiving Dr. Blake med. Thomson
X Co.

Tyler Allen, Three men sent Tyler
Valley came to complete the Engines

Mill general Carlen, 2 men drawn
by Board, Mr. Barstow sailed for
Europe. Mr. C. considerable time
X in New York arranging office on
5th Avenue, Large Armature plans
on shaft, Bros. Dynamo finished,

Monday Feby 6 81

Prof. Sullivan, Mass. Tempt. has only
arranged & working good with one magnet
X scale for same. Bros. wants such bottom
for signals so if a sometimes has 15 ohms
but he calls, perhaps yesterday.

New Maine, designs being worked
X up by Mr. Russell, of Office connections
etc. for same.

Motor, Francis experimenting with
X Rocket motor for water purposes by
request of Mr Edison

Hanger of main driving pulley
X placed with rods from wall
each side

Test made copy of Mr. B's
test as arranged for Philadelphia

Monday Feby. 7.

X19. pages —

Contract also made copy of contract Lamp Co with Light Co for exclusive gain to Dec. 1st at 25 c, each shareholder profits over that by 5 cts. as over the addition of 5 cts to be divided with Light Co.

Absent, Mr Eyblade in New York.

X Meeting. S.H. Mott red reduce dage to N.Y. with all shareholders.

Lumbago. Acheson commenced X rub on Lumbago on Hydrocele Press.

Tuesday Feby. 8. 81

Lumbago. Acheson pressed a fine shock in the axis and had X Bradley cut out a large cut very nicely, but 005 Uterus. Passed some nice shots dim. rec.

Gage Annuaire. All corrected on X 20 pages.

Illumination. Cor in the evening X special train leaving at eight from Mirair

Lexington. Dr Maria had made a bag of Hydrogen & one of air X for manure at Fair & replaced to try to produce. Metallic carbon lamps.

Present Eh. Cor Mercer

Wednesday Feby 9. 81

Absent Mr E. Johnson all day.

Factory Engine got under shelter of building,

Plating, Lawson having taken the long lamps, setting up another attempt this time encased in box.

Illumination, bot in evening for large number from surrounding towns.

Papers, Russets, Sofuns said to have favorable notices in the display last evening

Thursday Feby 10. 81

Sofuns carbons for Hand pattern gas fitment made in Gas Fitting Factory, no. Sofuns Bamboo carbons got been received.

Plumbago. Atkins got a complete Vorpe set and pressed specimens of plumbago & Rubestos pulp, one carbon in clamping & one in putting in lamp.

Absent Mr. Edison, Johnson, Carman, Mott & Krouse.

Plating, Lawson, bot in lamps & carbons, 27 in morning & had 6½ min connections through rubber tubes.

Well drilling stopped at about 126 feet apparently being taken down

Friday Feby 11. 81

Cleaning deposit. Dr Haid passed the gas through manu the high test returned then turned on Hydro carb gas and carb and oxygen in cooling, fair results.

Plumbago. Ashburn burned and set a number of crucs and got 7 blanks 34 5 min. Crucs ready for [illegible]

Plating. Crucs, certain by Lawson in the mercury bath showing the highest & smallest deposit, part out in washing bath.

Metal. Metals, one bell cerium & one iron refer connecting pinches. Not true. Bell iron very, very little from other quite large.

Nominated for special, Hotel Leslie.

Saturday Feby 12. 81

Hanchette. Sampler from Moore being tested. Hanchette has far marking the best & an excellent succeed. Full crucs drawing for weights in carbonizing marks much better, second then with full weights 18/8 219. Age 3 dc.

Cementation. Large cementation furnace complete. Ready for placing, letter and found too high resistance.

Note general of past week. Dr Haid operating carbon crucs. Ashburn finishing plumbago & carb & for blanks of the crucs. Dr Haid used large cementation furnace & found too high. Commence plating in guanidine in lengths at Factory.

Wednesday Feby 16.

Absent G. P. Moss since Saturday

Armature fina on return the large Armature apart & Brass soldering the joinces by electric arc

Plumb Stamper. Acheson has had Filamtage Lamp burning, Mr. E. was pleased with prospects.

Notice general order signed by Geo Gardner general Manager, Subscribe no shops & Education.

Motes compensator for evaporation made by Prof Ott received from Edison to open when lignis at a certain pressure in engine.

Files letter Ochard from Bramer,

Thursday Feby 17. 81.

Lamps, department abolished at the Factory. All cautions to be posted on.

Pumps. dont. contraction tubes leading into the common tube being tube 2.

Plating Separators. Gower has made flat shallow dish, number with holes in bottom through which pass the wires & ends of inner tubes. Now tube filled with plating solution up to proper height on carbons.

Large Armature. again together and tested old wires.

Plumbago. after heating in pumps observed to be much stronger, results of the stamper & platers by Acheson

Friday Feby. 18. 81

Phonograph Heater in Movable. to get
Xmt & out per standing 15. mec. master.

Insulation. Mr. Krenz: machine exp.
with Compound Not varying definition of
Insulation, representing to commence exp.
operations at knitting in Resistance Sta

10 H.P. Engine Hampson, 1150 Revs. repd.
Xgt Shop.

Meter. Eng. Co. Resistance
Xtd from the lamps now burning.

Meter Att completed me with Steel
arr. Spring. which in measuring an
Xweight, bounds and by a spinning strip
of paper. straight mark & division to
which hand is attached.

Saturday Feby. 19. 81

Hydro carbon. Dr. Haid. still experimenting to get loops of uniform coating

Beehive Armature. Copper, Steel & wooden
and work to day commenced cutting
Xmt dies & bars for Beehive Armature
Smaller one same principle also commenced.

Peter Armature. safely deposited in
the bearings.

Work general for past week Dr. Haid
experimenting, still in depositing metallic
hydro carbon. Peter radial Armature
bars removed & soldered on. Winding Armature
down to wire. average work commencing at
disc ~~commutator~~; A number of Phonograph
Lamps made & shown visitors. Mr.
Edison & others absent at N. Y.

Sunday Feby 20. 81

Insulation. Francis tests with Evans & Thompson's Megohmeter the insulation of Siemens very good insulation

Gota dynamo. All in readiness and magnets connected in series

Monday Feby 21

Mr. Francis determined the speed preparatory to the current. Form 143

Monday Feby 21. 81

Disc Armature. Dean commenced action Kerosene with 1½ Meter in disc armature.

Disc. Another armature wound with the bars, due incorrectly to expose first under the mica-protecting ring.

Exp. lamps 42 platinum lamps carbon & North B. incandescent. Test B.M. for both at 288

Brazil Nut. but from Renan can be worked. Mr. Mutter No 2 D.G.S. No 2 the best. large quantities along banks of Amazon — D. Tabora, N.G. but can be worked. G. Hy. 25 in. plants out of 150 tried Hannona "Cabmaant, grow after long without joint — number which during 2 D. Guanmaby N.G.

Thursday Feby 22. 81	Wednesday Feby 23. 81
Londs. Now in working. Some not running	
Motor Miller Brown's connector magnets	Hampson Eng. runs 440 with 70 lbs steam
X multiple arc in main line and with 2	X Gladstone (1888 Pars. on Eng. + 1230) = 60 steam
lamps, higher speed as lamps are at 7.	Melhuish 1888 Pars. 57. lamps. 16c
arc also thus reversed. low resistance	
New lamp. 5 carbons screwed in clamps	Shop fitters. brackets nad + D. bannard +
for plating. sealed in vitreous glass	assistant putting wires in shop
Remade wire + give good appearance	
Deposit on paper. A model of paper	New lamp. lamps heated on simple
X carbons heated by flame very quickly	X standing wires, heated arcs in clamps
but irregular deposit	are discharged by mercury.
Dynamo 1 lamp. testing by Thomson 6	Hydro carbons. burning through porous
X ohms cold. 20 ohms. 21 volts 4.132 fr	X cups a quart many experiments made +
lts at 16.c. 6th & per H.P. Book 232 fr 98	have to be tried.
Engines. Hampson tried empty. floors from	Gas lamps. 42 all gone but 16 in alone 10 lm
X station not sufficient. Potter Eng. now	X have vacuum.
Placed.	7 ~~Deposit tubes~~ Hard treatments sent
	to Laboratory

Thursday Feby 26. 81

Tube Eng came about two minutes over
probably to see Per Mint for electric [illegible]
Hence not about found stones in adv.
having commutator end. Running [illegible]
all the lamps at 5.30 Pers.

Factory. Boiler fires up with Stow!
Sword fire.

Yelding Lamen had bad [illegible] made
Sand Piston 5th carbons about 2.30

Hydro carbons Blaise gas a mixed
of say five ones and sixes in
Now was determined the condensers
Some leaved on Gas Eng. of 15 Lambs

Small motor, Magnetic & Magnetic
reversed

Friday Feby 25. 81

Factory. Partition taken from side of
Planing room and swing across mid
ends of rooms.

Boiler deposit 27 tons drawn by Stone
Dim floating.

1 hp Motor. 7.2 layers 020 wire on
Magnets 234 ohms insert Pd 232 to 111

Saturday Feby. 26.81		Monday Feby 28.	
Porter Allen now all day at about	3.00	Porter Allen, now 6.00. last night lamps at 6.00 Rec	
Finishing to smoothe his job.		at about 18th forming that she was	
Finished wire. From Colorado to Lice by		All that has been expected of him on Sat.	
Francis.		So day. Mr Porter has allowed another charge	
Spread white and Italian down from	Laboratory	so has not value etc.	
and commenced to lathe. Foreman gone home		Pump Motor now partly sent to shop	
		to replace with another machine.	
Miller cause a box sent of paper	Miller cupe		
		Tools. Francis lathing lamps all day.	
Work general fast work. Porter Engineer		Homebage (4 to 5 Francis). 3.4 over	
now for the first. Commenced forward		average. Boiler No. 2 weight 1742 etc.	
and work begun on disc commutators			
Porter at factory finished up Edina & shown work			
on customing. Francis on Motor Mains			
Easing blocks. Motor Mains. Francis about			
all work.			

Thursday March. 1. 81	Wednesday Mch 2. 81
Capt. Richard Allen stating that Cf. Advertisements in connection with E.E.G. be now been agreed and public School authorities are anxiously desirous to have be posting notices in the Streets. And all moved weight we assist	Canton Flasks, double size holding 60 Jammers in use & of size to order in new pm informed, be tried
Appointments & Lamp fitters at 4.00 & body run quite & not shower very bad Kitchen scrapping & painting to press same Man pen for description to make	Pumps Mercury. All being taken again & remounted with new recent Force. Engine pumps too insufficient for the boilers & larger one must probably be ordered
Miller, Francis gone back to old principle of receiving plates	Sockets, screw caps not Cost. Ance 19 additional Lamps fitted up in Shops
N.F. Mch. Informally Bears. Mch. Finding Formerly Reaches Nine pounds have been received for N.E. Whole	Illumination One machine burner Ability in starting, but only 4 Lamps have been used.
	Visitors McManus & Baty in Record from Philada. Bath & Meriens under connection Implement

Thursday Mch. 3rd 81

Sutton Engine run at 1135 revs for about
hr. & an. stick box heated slightly and on
adjusting engine was found very tight.
dressed & motion taken out of cylinder.

Illumination this evening eight
Generator running.

Visitor Clarke in evening with
drawings of disc commutator &
complete armature.

Gymnasium. one repaired to day.
the other bound last evening
will have to be unwound.

Friday March 4. 81

Hampston Eng. running 1133 - 60 lights
on

Potter Iron running about 800 nearly
nearly all day, warmed some but
did not cut on stop.

Lamps lists 23 brought up yesterday
for Dynamo. burning 1840 mins with
but 15 broken.

Meter Francis working on meter.
Repair stopper lined glass tube
Carter Measuring weighted tube thermom
and copper wound on meter.

Leaves All shut down at 8 o'clock

Saturday Mch. 5, 81

Photographic All acetylene instruments packed for shipping to N.Y.

Engines Porter & Hampson bolts securing the any lights on Halpson, Porter completed 3 rollers finished other heat work other completed & ready to about 5.00

Work general shop work. Acheson pipe boiling to press and steamtap leaks

Engineer absent in N.Y. Matched the work yet associates planning and making good progress on dive commutator

Hampson Eng. started on every lamps Porter Eng. been run more or less to try to get heat out of bearings Tests of lamps Eng. made on table in Laboratory —

Allan Olsen recd to day having been absent Feb. 28th.

Monday Mch. 7, 81

Dive Armature All repaired dives Hand two cables packed for shipment to New York

Plating 3 tr. troughs in use to day 152 carbons plated,

Tyson pumps 6 lamps & lots remove off in about 8 hours

Dives Armature down by Hampson Engine around on commutator.

Tuesday Mch 8, 81

Furnishing Gas & Engine trying all lectures in view of writing in afternoon

Paper Lamps Treated by Dr. Hare

Water by Francis 36 lb 7 oz average 45 1/5 ohms Bb. 244 Sec. 231 ce

Water Eng. now this morning the cold Fine again is very fast in the solid bearing

Plumbago Acheson commenced pursuing experimentally for guiding to give regularity & thickness of sheets

Plating 100 taken from baths Area 200 are to be taken out in the morning

Hampson Anneson 55 Machine Fine asphaltum arena not 95 the necessary work

Wednesday Mch 9, 81

Burning, Dean & wife now worked all last night, trying, drying & burning baths water

Farmer, Andrews making a permit of acid to contain 4 Bolsen tubes for carbonizing

Plumbago & Chlorate Potassium ~~[illegible]~~ this night this afternoon boiled and filtered of liquid put on bath, product effervescence embedded to brown liquid, and deposited to [illegible] brown mass, and hot water and boiled filtered & liquid put in boiler to dissolve of platinum dissolved, result a brown [illegible] deposit on negative pole [illegible] by nitric acid or Prussic

Mch. 9

Illumination, lamps burned to night on 7 machines

Operations too used up today one key broke one by being connected with a sp. solder

Visitors. Mr. Erson out to ships for first time July 25.

Thursday Mch 10

Polar Eng. Service worked all night on bearings at 3 mills. Another use all lamps on night except in bearing room last night past Bobbit

Records ordered by Mr. E. to go to Pat. Office with Electrical patents & Canada correspondence must come from this date.

Hamilton Eng. run stop afternoon for factory, and work very satisfactory

Visitors. Mr. E. has again in evening Geo. Dr Moses Howe & Col. Crosby

Mch 11 - Came in to New York -
Mch 18 Received Annual Dividend
" " 2 Months Rent at 65 - 5 Cents
" 19 - Mahons set up the engine new
cylinder at 120 on the Volume Mach. Mus Pay

Reach Sag & Multa 187, 188
Exp lumber 2/19/95. 185-163.194.
Homer Lake Multa 236.

10 lbs tin
10 " lead
5 " antimony
John U. Stoebener
37 Orchard St. N.Y.
Bet. Canal & Hester, 6 blks
from Bowery

4133 ft lbs

8 per hour power
8 per hour at least horses
21 dollar

95. book 282.

Wallace & Mann = Sawin